## MicroBooNE Cryostat Vessel Market Survey and Budgetary Estimate

It became apparent the other day that with MicroBooNE's growing number of collaborators some may not be aware of important events that took place early in our enterprise. A case in point is a Market Survey and Budgetary Estimate for the construction, Code testing and delivery of the MicroBooNE cryostat vessel to FNAL. Tom Muller and I started by phoning ASME Code pressure vessel manufacturers one year ago to ask if they were interested in our work. Of our forty calls or so, we found these fifteen interested manufacturers listed below and of them, five responded with estimates. One responded not only with an estimate for the "standard" 1 inch wall design but, as our instructions encouraged, an estimate for an optional design of thinner wall and external ring stiffeners.

Responding to a Market Survey is time consuming and expensive for these companies and few have available resources to reply with well founded estimates. Of the five responders, three took the time to work up a good estimate while the remaining two just loaded enough dollars into their price so that if they got the job there was enough margin to cover whatever the real costs would be.

John Sondericker

## <u>Pressure Vessel Manufacturer List - September 11, 2008</u> Market Survey for the MicroBooNE Detector Vessel.

- 1) Boardman, Inc. (Oklahoma) Jack Page Quote = \$1,200,000 1-405-634-5434 ext. 247 Shipping to FNA = \$ 30,000
- 2) Chart Industries (New Hampshire) Bill Klink X <u>Declined to Bid</u> 1-800-400-4683
- 3) Chicago Bridge & Iron -CBI (Illinois) Steve Cihlar X <u>Declined to Bid</u> 1-815-436-6668 Rick Luther
- 4) Chattanooga Boiler & Tank Co. (Tenn) Joe Giada X <u>Declined to Bid</u> 1-423-266-7118 Their business is the busiest it has been in 30 years
- 5) Enpro/Curtiss Wright Flow Control Inc. (Texas) X <u>Declined to Bid</u> 1-281-452-5865 Lee Treichel
- 6) Holloway Company (Texas) Terry Brown X <u>Declined to Bid</u> 1-800-869-8663 Bryan Giles, too busy
- 7) Imperial Steel Tank Co. (Illinois) Quote = \$500,000 1-800-282-1574 Sal Cerda....Jim Broad, "Jack" McFadden Transport to Fermi = \$15,000 to \$20,000

8) Kennedy Tank & Mfg. Co. (Indiana) Paul Bolin X Declined to Bid 1-317-787-1311 way too busy 9) Melco Steel, Inc. (California) X Declined to Bid 1-626-334-7875 Michelle Kashou 10) Precision Custom Components (York, Pennsylvania) 1-717-848-1126 X2400 Earl Newman Quote = \$2,745,000Quote = \$691,95011) Riggins Company (Virginia) Lisa Roles Quote = \$597,450 Optional 1/2" shell with external stiffeners Both Bids include shipping to Fermi Kelly Topp X 309 1-757-826-0525 X303 12) Rode' Welding Service (Illinois) X Declined to Bid 1-847-439-0910 Phil Strauch 13) Trumbo Inc. (Tenn) Rick Rainey Quote = \$575,9651-901-948-7664 Transport to Fermi Quote = \$12,91014) Universal Industrial Gasses (UIG) (Pennsylvania) X Declined to Bid Bruce Kriebel 1-610-559-7967

X Declined to Bid

15) WSF Industries (Buffalo, N. Y.) Gary Fornasiero

1-716-692-4930